

REMARKS/ARGUMENTS

Claims 1, 4 and 10 have been amended. Support for these amendments is found in the claims as filed and at specification at page 7, lines 17-29 (0.31% C). Claims 5 and 7 have been amended for clarity. New Claims 11-19 have been added. Support for the new claims is found at specification at page 7, lines 17-29 (1.18% Si) and page 2, lines 12-32. No new matter has been entered.

Claims 1, 4 and 10 have been amended to require a carbon content in a range of 0.31 to 0.5%. Nishioka et al. (4851052) limits the carbon content to from 0.001 to 0.300%, and limits the Si content to up to 0.8%:

The steel according to the present invention includes as its essential nonferrous constituents 0.001–0.300% (weight percent; the same hereinafter) of C, not more than 0.8% of Si, 0.4–2.0% of Mn, not more than 0.007% of Al and 0.0010–0.0100% of O. In addition, it may as required contain one or more of the following in the amounts indicated: not more than 1.5% of Cu, not more than 10% of Ni, not more than 1% of Cr, not more than 1% of Mo, not more than 0.2% of Nb, not more than 0.5% of V, not more than 0.05% of Ti, not more than 0.05% of Zr, not more than 0.0025% of B, not more than 0.05% of REM and not more than 0.008% Ca, the remainder being iron and unavoidable impurities.

See Col. 2, lines 22-35 of the reference. Nowhere in the reference is a higher amount of carbon suggested, and in fact Nishioka is very precise in his limitation on carbon, providing three decimal places to emphasize the upper limit of 0.300%. In addition, Nishioka relates to steel plates – i.e., flat products – rather than the, e.g., wires and bars of the present invention. With regard to new Claims 11-13 requiring a relatively high amount of Si (1.18-1.5%), Nishioka nowhere suggests these amounts either, as the upper limit of 0.8% is quite clearly stated in the above-cited passage.

To anticipate an invention, a prior art reference must disclose each and every feature of the claimed invention, either explicitly or inherently. For obviousness, the claimed invention must be suggested. However, Nishioka fails to disclose, point out or suggest a carbon content in a range of 0.31 to 0.5% or a Si content of 1.18 - 1.5% as required by amended claims 1, 4 and 10 and new Claims 11-13. Nishioka also fails to teach or suggest a volume fraction of acicular ferrite as presently claimed. Therefore, the rejection under 35 U.S.C. § 102(b) over Nishioka is no longer applicable.

Any question that Nishioka suggests Applicants' presently claimed limitations on carbon C and silicon Si in a manner that would render them obvious under 35 U.S.C. § 103 is unequivocally answered in the negative at col. 2, lines 36-43 of the reference, where Nishioka explicitly states that "care must be taken to prevent their content from becoming too high.":

C, Si and Mn enhance the strength of the steel and also promote structural hardening at HAZ. They therefore have to be contained in appropriate quantities but care must be taken to prevent their content from becoming too high. From this viewpoint, a steel to be subjected to the method of this invention should contain C at from 0.001 to 0.300%, Si at not more than 0.8% and Mn at from 0.4 to 2.0%.

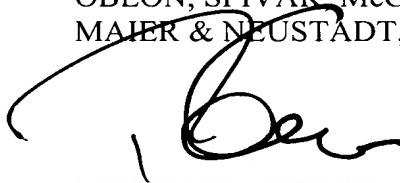
Therefore, the rejection of Claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over Nishioka is unsustainable, even if the so-called "admitted prior art" is accepted as stated in the Official Action at pages 3-4 thereof.

Application No. 10/593,257
Reply to Office Action of October 31, 2008

Accordingly, as the present invention is neither anticipated nor obvious the withdrawal of the outstanding rejections is respectfully requested, as is the passage of this case to Issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Richard L. Treanor
Attorney of Record
Registration No. 36,379

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)